instance, in a spigot and socket water main, as the vacuum to be maintained by the joints is small, and it is an advantage to be able to quickly draw the

packing from a joint for the replacement of a pipe.

The wear on a straight length of piping is greatest on the bottom, and this wear should be carefully noted from time to time, and when it reaches

the permissible limit the collar joints on the pipes should be slackened where

necessary, and the whole length of piping turned round on its axis, say 90°, so as to bring an unworn surface into the position of greatest wear

In this way the pipe may be worn more or less uniformly all round, and it

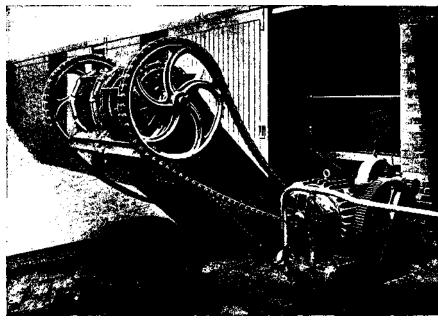


Fig. 26.—Discharge End of Water-sealed Ash Conveyor

will be appreciated that the life is thereby increased three or four times.

Water-sealed Ash Conveyor.— This system of ash removal, developed

by the Underfeed Stoker Company, Ltd., consists of a scraper conveyor running in a cast-iron or concrete trough which is filled with water. The ashes from the rear end of the boiler grates are discharged by water-sealed shoots direct into the trough, whence the ashes are continuously removed and discharged by the conveyor.

Fig. 25 shows more or less diagrammatically a typical general arrange-

ment of this special type of ash handling plant, known as the USCO Ash

Conveyor. The water-sealed shoots from the boiler grates are shown at A, while the conveyor and trough are shown at B and c. The ash shoots are shown in section at D, from which it will be seen that an emergency ash door

is provided for the extraction of the ashes in the event of the conveyor being

out of commission. The conveyor chain is driven by motor and gearing